

Amendments to the Claims:

1. (previously presented) A turbine wheel connected to a shaft and configured to be rotated with the flow of gas through a housing to thereby rotate the shaft, the turbine wheel comprising:

a body portion configured to rotate about an axis; and

a plurality of blades extending radially outward from the body portion of the turbine wheel, each blade defining a first edge and a second edge, the first edge extending generally radially and the second edge extending generally axially,

wherein the second edge of each blade is a leading edge of the blade and defines a nonlinear, concavely curved profile in radial-axial projection.

2. (previously presented) A turbine wheel according to Claim 1 wherein the turbine wheel is configured to be rotated proximate to a plurality of vanes in the housing.

Claims 3 – 5 (cancelled)

6. (previously presented) A turbine wheel according to Claim 1 wherein the first edge defines a profile that extends axially and radially.

7. (previously presented) A turbine wheel according to Claim 1 wherein all of the blades are substantially similar.

8. (currently amended) A rotary apparatus configured to circulate a gas, the apparatus comprising:

a housing defining an inlet and an outlet;

a turbine rotor disposed in the housing and configured to rotate with a flow of the gas through the housing, the turbine rotor having a body portion configured to rotate about an axis and a plurality of blades extending radially outward from the body portion, each blade defining a first edge and a second edge, the first edge extending generally radially and the second edge extending generally axially; and

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a plurality of vanes disposed at circumferentially incremental locations in the housing radially outward from the second edge of the blades such that the blades are subjected to cyclically varying aerodynamic forces as the blades pass in proximity to the vanes during rotation of the turbine rotor, thereby cyclically stressing the blades, the vanes being adjustable to thereby control the flow of the gas through the housing,

wherein the second edge of each blade is ~~one of~~ a leading and trailing edge of the blade and defines a nonlinear, concavely curved profile in radial-axial projection.

Claim 9 – 10 (cancelled)

11. (previously presented) An apparatus according to Claim 8 wherein the housing defines the inlet radially outward from the rotor, the rotor being a turbine wheel connected to a shaft and configured to be rotated by the circulation of the gas through the housing and thereby rotate the shaft.

12. (original) An apparatus according to Claim 8 wherein the housing defines a diffuser radially outward from the rotor, the rotor being a compressor wheel connected to a shaft and configured to be rotated by the shaft to thereby compress the gas in the housing and deliver the gas through the outlet to the diffuser.

Claim 13. (cancelled)

14. (previously presented) An apparatus according to Claim 8 wherein the first edge of each blade defines a profile that extends axially and radially.

15. (original) An apparatus according to Claim 8 wherein all of the blades are substantially similar.

Claims 16 – 21 (cancelled).

22. (currently amended) A turbine wheel according to Claim 1 wherein the second edge of each blade defines a smooth and continuous concave profile ~~in radial axial projection~~.
23. (currently amended) A turbine wheel according to Claim 1 wherein ~~the second edge of each blade defines a concave profile in radial axial projection, the profile of the second edge extends~~ extending smoothly and continuously from a first end to a second end in a generally axial direction, the first and second ends extending radially to a greater extent than a midpoint of the profile between the first and second ends.
24. (currently amended) A turbine wheel according to Claim 1 wherein the second edge of each blade defines ~~in radial axial projection~~ two axial portions with a concave portion therebetween, the concave portion having a curvature that defines a center of curvature located radially outward of the second edge.
25. (currently amended) An apparatus according to Claim 8 wherein ~~the profile of the second edge of each blade defines a~~ is smooth and continuous ~~concave profile in radial axial projection~~.
26. (currently amended) An apparatus according to Claim 8 wherein ~~the profile of the second edge of each blade defines a concave profile in radial axial projection, the profile extending~~ extends smoothly and continuously from a first end to a second end in a generally axial direction, the first and second ends extending radially to a greater extent than a midpoint of the profile between the first and second ends.
27. (currently amended) An apparatus according to Claim 8 wherein the second edge of each blade defines ~~in radial axial projection~~ two axial portions with a concave portion therebetween, the concave portion having a curvature that defines a center of curvature located radially outward of the second edge.